Name:

at1113exam: Expand, factor, and solve quadratics (v310)

1. Expand the following expression into standard form.

$$(9x + 2)^2$$

2. Solve the equation.

$$(6x + 5)(3x - 8) \;=\; 0$$

3. Expand the following expression into standard form.

$$(2x - 9)(5x + 7)$$

4. Expand the following expression into standard form.

$$(7x + 5)(7x - 5)$$

5. Solve the equation with factoring by grouping.

$$12x^2 + 18x + 10x + 15 \;=\; 0$$

6. Solve the equation.

$$7x^2 + 21x + 33 \;=\; 4x^2 - 2x + 3$$

7. Factor the expression.

$$x^2 + 3x - 40$$

8. Factor the expression.

$$64x^2 - 9$$